

**HUBR 1067.3 (10105485) - NDH**

patient at previous point in time which were negative is indicative of seroconversion.

*new* ✓  
Claim 39: A method for determining hepatitis C virus specific seroconversion antibodies, comprising incubating a human sample suspected to be a seroconversion sample containing hepatitis C virus specific antibodies taken from a subject (under reducing conditions which prevent formation of covalent, cross linked molecular aggregates with at least one polypeptide consisting of an amino acid sequence found in hepatitis C virus protein NS3 region, which is immunologically reactive with said hepatitis C virus specific seroconversion antibodies, and determining binding of said antibodies to said polypeptide to recognize seroconversion in said subject.

Claim 40: The method of claim 39, wherein said polypeptide has been modified at least one cysteine residue.

*Deontd* Claim 41: The method of claim 40, wherein said cysteine residue has been modified by covalent attachment of a modifying group.

Claim 42: The method of claim 40, wherein said cysteine residue has been replaced by another amino acid.

Claim 43: The method of claim 39, wherein said polypeptide consists of (a) at least amino acids 21-282 of SEQ ID NO: 9 and (b) a contiguous sequence of less than 20 amino acids that is not found in hepatitis C virus proteins, wherein (b) has been concatenated to the N or C terminus of (a), or an isolated polypeptide which is at least 90% homologous thereto, wherein at least one cysteine of said polypeptide is modified either by replacing it with another artificial or natural amino acid, or by a modifying group.

Claim 44: The method of Claim 41, wherein said modifying group is maleimidodioctylamine, N-methyl-maleinimide, iodoacetic acid, and iodoacetamide.

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- Claim 45: The method of claim 42, wherein said cysteine residue has been replaced by serine, or  $\gamma$ -aminobutyric acid.
- Claim 46: The method of claim 39, wherein said polypeptide consists of at least amino acids 19 to 290 of SEQ ID NO: 9, and no more than amino acids 9 to 300 of SEQ ID NO: 9.
- Claim 47: The method of claim 39, wherein said polypeptide consists of at least amino acids 16 to 293 of SEQ ID NO: 9, and no more than amino acids 12 to 297 of SEQ ID NO: 9.
- Claim 48: The method of claim 41, wherein said polypeptide consists of amino acids 14 to 295 of SEQ ID NO: 2.
- Decond.*  
Claim 49: A method for recognition of hepatitis C virus seroconversion, comprising: incubating a human sample suspected to be a seroconversion sample containing hepatitis C virus specific seroconversion antibodies taken from a subject, under reducing conditions which prevent formation of covalent, cross linked molecular aggregates with at least one polypeptide consisting of an amino acid sequence found in hepatitis C virus protein NS3 region, which is immunologically reactive with said hepatitis C virus specific seroconversion antibodies, and determining binding of said antibodies to said polypeptide to recognize seroconversion in said subject.

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**REMARKS**

Entry of the foregoing amendment is requested.

Claims 27-38 were pending previously. Claims 27-36 are cancelled. Claim 37 was not rejected in the last office action, and remains as it was. Claims 27-36 are replaced by claims 39-49. Claim 38 is amended, and a Showing of Changes is presented.

Applicants turn to the rejection of claim 38 first. The examiner has rejected this claim in view of JP 06074956, plus Beach or Vallari, which are newly cited. Claim 38 is also rejected over these references taken with Schuurs, et al, re. 32,696.

Applicants have considered this rejection, and traverse it.